

It's the Pits

Direct-Fed Microbial Feed Additive for Bovine (dairy & beef)

Making Direct-Fed Microbials Work for Your Herd

Confronting disease is an important factor in maintaining a healthy and prosperous ruminant production. Disease can negatively impact productivity, animal welfare, mortality and a profitable bottom line. Research has shown, and professionals in the field have reported, that an effective way to keep a herd healthy is to supplement their diet with effective direct-fed microbials (DFM).

An effective DFM greatly enhances the animal's ability to balance the fungi, bacteria, and yeast that live inside the cow. Healthy animals require each type of microbe to be present, at an appropriate proportion, for survival and to provide the nutrients it needs. It's possible that overfeeding grain or mycotoxins from poorly stored feed may inhibit particular microbes, which results in a pH change in the animal's system. This creates an environment that has the potential for problems to occur.

Probiotic and Direct-Fed Microbial

The term probiotic is defined as a live microbial feed supplement, which beneficially affects the host animal by improving its intestinal microbial balance. The FDA requires feed manufacturers to use the term direct-fed microbial (DFM) instead of probiotic and has narrowed the definition to a source of live, naturally-occurring microorganisms.

Balance

Achieving balance in a ruminant's digestive system helps fight unwanted microbes such as ionophores and monensin. In part, this is done by giving preferential treatment to specific beneficial rumen microbes that suppress growth of unwanted rumen microbes. Similarly, antibiotics fight off foreign microbes that invade the animal's digestive tract. However, this is not done without taking out the beneficial ones with the bad. DFM's enhance rumen function by adding beneficial bacteria to overwhelm the harmful microbes. Subsequently, this allows the rumen's own defense system to balance itself to improve feed conversion efficiency.

Beneficial Microorganisms

DFM uses beneficial microorganisms that colonize the rumen and lower gut which help with digestion. Unfortunately, when young animals are raised in sterile environments, their digestive tracts lack normal colonization of microorganisms. This increases their need for nutritional supplementation. Many animals will require more vitamin K or other B-Vitamins and assistance for their abnormal immune responses. Additionally, animals without a normal function microbial flora may be more susceptible to bacterial infections due to the onslaught of pathogenic organisms.

DFM Benefits

- Improves animal health
- Prevents colonization of pathogens
- Stimulates immune system
- Increases absorption of amino acids and vitamins
- Improves digestive system
- Produces nutrients or other growth factors
- Produces anti-bacterial compounds (acids, bacteriocins)

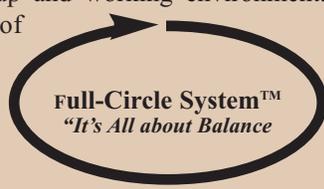
Research

Studies have shown that feeding DFM to lactating dairy cows can increase milk production and decrease the stress on the animal.

DFM have also been shown to increase daily gain and feed efficiency in feedlot cattle, enhance milk production in dairy cows and improve health and performance of young calves. Other research shows that supplementing diets with DFM, plus enzymes, significantly improved feed efficiency and increased daily weight gain among young bulls

ProfitPro's Full-Circle Animal, Manure and Soil-Plant System™

starts and ends with the animal. Feeding **Performance Bovine Direct Fed Microbials** feed additive improves feed efficiency, conception rates, natural immunity, manure digestion, facility clean-up and working environment. Also proper bioaugmentation of manure, improving soil-plant health will improve the feed quality coming back to the animal.



Performance Products, Inc.

Performance Products offer the industry the premiere microbial for bovine. Their product contains microbials and enzymes, as well as live yeast. This package of bacteria, enzymes and yeast are species specific to improve digestive health and aid feed utilization.

What makes Performance Product different?

- All the bacteria in the formulation comes from cows.
- Utilizes micro-encapsulation, which allows time release action that improves stability and focuses on delivery to the gut.
- Most beneficial, highly concentrated combination of host specific live bacteria.

Also ask about **Performance Bovine Microbial Gel and Healthy Calf Plus.**

Check out ProfitPro's Manure Management Service at www.profitproag.com or manure.profitproag.com

Dr. Jim Ladlie will be one of the speakers on the **FREE Manure Management Teleconference** scheduled for **April 7, 2011** from 8 to 9 pm CDT on **"Direct Fed Microbials Feed Additives for Bovine (dairy & beef)"** For more information, go to manure.profitproag.com.